

MEET THE TEAM







DLR GROUP

Courts Planner



MASTER ENGINEERS & DESIGNERS

M. E. P. & Structural Engineering



HURT & PROFFITT

Civil & Environmental Engineering



FORELLA GROUP

Cost Estimating & Value Management





PROJECT GOALS

This is a "legacy" project

- The courthouse is the focus of downtown Fincastle and rooted in Botetourt County's history.
- The courthouse façade and spire, although not authentically historic, should either be maintained or closely replicated in scale and design.
- This project could spur a "renaissance" for Fincastle/ Botetourt County.
- Improve accessibility and security.
- Develop a healthy building
- Safety, comfort, and rights of the building users should not be compromised.
- Inmates and defendants should not be out in public.
- Virginia Justice Reform can increase jury trials
- Preservation and enhancement of the Courthouse Square as an easily accessible public space.







EXISTING DESIGN CONDITIONS

- Non-ADA Compliance
- No separate circulation
- Inadequately sized workstations/offices
- Non-compliant VA Court Standards
- No attorney/client conference room
- No courthouse lobby













EXISTING PHYSICAL CONDITIONS

- Significantly damaged and rebuilt following 1970 fire
- 2019 Facility Assessment identified pervasive issues
- Building Systems "near the end of their expected life"
- Water infiltration throughout the building roof to foundation
- Masonry walls with cracks and movement







BOTETOURT COUNTY CIRCUIT COURTHOUSE | FACILITY ASSESSMENT

BOTETOURT COUNTY CIRCUIT COURTHOUSE BUILDING

EXTERIOR ENVELOPE | MASONRY

The exterior of the Original Building is uninsulated multi-wythe brick masonry. Much of the main building brick is original to the 1840's, but portions of the exterior face brick were replaced in the 1975 re-construction. The northernmost addition dating to 1975 is brick veneer and concrete masonry units with insulated cavity. The brick at the "Vault 2" additions dating to 1893 and 1918 at the northeast is original brick which has been painted.

The brick masonry appears to be in generally good condition with the following deficiencies noted. At the 1975 addition we observed locations where the faces of brick have spalled from freeze-thaw, locations where the mortar has eroded from water infiltration near ground level, locations of the mortar has spalled horizontally leaving wire reinforcement exposed, and a crack and indication of movement at the floor line of the northernmost face.

There are also signs of water infiltration through the cast concrete walls and concrete block masonry walls at the lower level. The 1972 drawings indicate parged walls with 2 coats of (liquid applied) waterproofing (drawing 14) which may have deteriorated over time and perimeter drainage tile (drawing P-1) which may have become blocked.

Recommendations: Repoint mortar and replace brick where damaged to prevent further water damage. Repair the horizontal crack at north wall location, replacing brick and block as needed.

Excavate around the 1975 addition to allow the installation of a waterproofing membrane and protection board. Clear the existing drain tile or replace to allow proper drainage away from retaining walls.

SPECTRUM DESIGN JOB NO. 18012



Spalling Brick and Eroded Mortal



Spalling mortar exposing wire reinforcemen



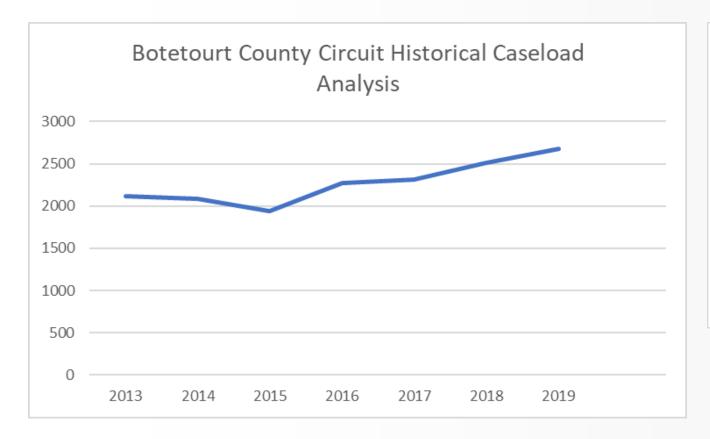
Water infiltration and cracking at masonry walls

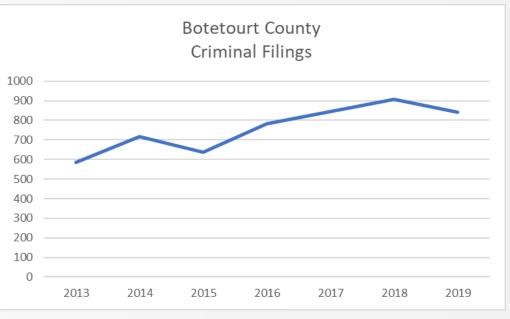
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EXISTING CASELOAD HISTORY







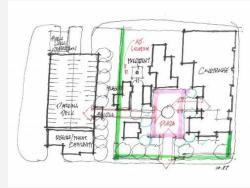


PROCESS & MILESTONES

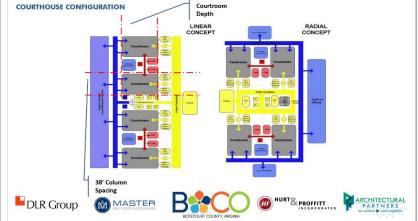
- Field Investigations
- Concept Development
- Site Studies
- Floor Plan Studies
- Floor Plan Design Options











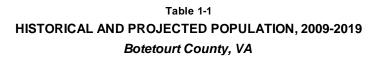


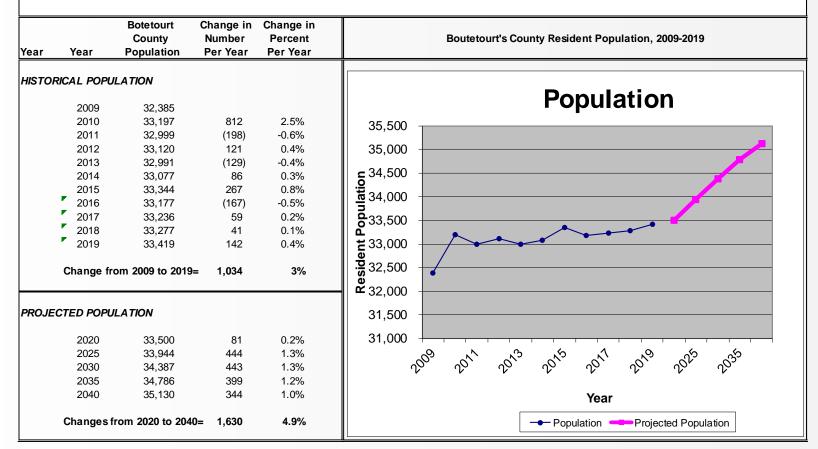




NEEDS ASSESSMENT & METHODOLOGY

- Population Growth
- Caseload trend analysis
- Legislative changes
- Change in Staffing





Population Source: Demographic Research Group of the Weldon Cooper Center for Public Service, June 2019, University of Virginia Note: Forecast only provided in five-year increments. The consultant used a straight line projection to estimate years between those intervals.





CASELOAD TREND ANALYSIS

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Contested Divorce					32	49	37	34	40	26	22
Domestic & Family Level 1					52	40	55	60	60	34	54
Domestic & Family Level 2					16	5	5	9	7	7	15
General Civil Level 1	414	410	318	356	3	7	2	3	1	4	6
General Civil Level 2					44	55	44	41	42	53	47
General Civil Level 3					34	40	30	30	41	22	42
Miscellaneous Civil									1003	1190	1166
Probate/Wills					0	4	3	2	0	2	3
Probate/Wills Level 2					9	7	7	7	9	8	14
Uncontested Divorce					87	91	70	63	67	92	78
Misdemeanor					154	217	189	163	198	171	280
Capital Murder									0	4	0
Non-Capital Felonies	245	225	107	139	540	655	585	732	789	857	806
Other Criminal Matters	495	557	576	620	46	63	52	52	56	45	36
Miscellaneous	206	202	259	206	1095	850	861	1075	0	0	
Other					1	0			1	1	109
Adminstrative Law							4	3	1	0	0
Total	1360	1394	1260	1321	2113	2083	1944	2274	2315	2516	2678
Criminal	740	782	683	759	586	718	637	784	845	906	842
Civil	414	410	318	356	81	102	76	74	1087	1269	1261
Domestic/Family	0	0	0	•	68	45	60	69	67	41	69
Probate/Wills	0	0	0		9	11	10	9	9	10	17
Divorce	0	0	0		119	140	107	97	107	118	100
Misdemeanor	0	0	0		154	217	189	163	198	171	280
Miscellaneous/Other	206	202	259	•	1096	850	861	1075	1	1	109
Adminsitrative Law	0	0	0		0	0	4	3	1	0	0
Total	1360	1394	1260		2113	2083	1944	2274	2315	2516	2678







COURT ANALYSIS & PROJECTIONS

						Historica	1					Projections										
Filings	2009	2010	2011	2012	2013	2013 2014 2015 2		2016	2017	2018	2019	2020	2025	2030	2035	2040						
CIRCUIT COURT																						
Criminal					586	718	637	784	845	906	842	874	1032	1190	1349	1507						
Civil					81	102	76	74	1087	1269	1261	3357	889	1228	1569	1913						
Domestic/Family					68	45	60	69	67	41	69	69	70	71	72	73						
Probate/Wills					9	11	10	9	9	10	17	18	22	27	31	35						
Divorce					119	140	107	97	107	118	100	113	115	117	118	119						
Misdemeanor					154	217	189	163	198	171	280	290	316	345	376	410						
Miscellaneous					1096	850	861	1075	1	1	109											
Other					0	0	0	0	0	0	0											
Adminsitrative Law					0	0	4	3	1	0	0											
Total					2,113	2,083	1,944	2,274	2,315	2,516	2,678	2,769	3,258	3,755	4,245	4,740						
Clerk Workload Filings		8,950	8,260	9,648	10,053	8,875	9,069	9,014	9,109	9,113	9,513											
Population		33,197	32,999	33,120	33,123	33,080	33,380	33,252	33,313	33,352	33,419	33,387	33,936	34,484	34,807	35,130						
Judgeships					1	1	1	1	1	1	1	1	1	2	2	2						
Judicial Staff					1	1	1	1	1	1	1	1	1	2	2	2						
Clerk of Circuit Court					8	8	8	8	8	8	9	9	10	10	11	12						
Commonwealth Attorney					8	8	8	8	8	8	8	9	10	10	11	12						
Court Security					7	7	7	7	7	7	7	7	7	7	7	7						
Registrar (1)		2	2	2	3	3	3	3	3	3	3	3	4	4	5	5						
Total Court Staff (2)	-	-	-	-	23	23	23	23	23	23	24	25	26	28	29	31						

- 2 JUDGESHIPS REQUIRED IN 2030
- 2 CIRCUIT COURTROOMS REQUIRED
- TOTAL
 PROJECTED
 COURT STAFF
 IN 2040 = 31





SPACE PROJECTIONS

COURT SUMMARY SPACE NEEDS

Botetourt County, Virginia

	Exis	sting	Upg	rade	20	020	20)25	20	30	20	35	20	040
Components	NSF	NSF DGSF N		DGSF	NSF	DGSF								
Circuit Court		2,600	3,780	5,103	3,780	5,103	3,780	5,103	6,720	9,072	6,720	9,072	6,720	9,072
Circuit Court Clerk		4,017	4,070	5,291	4,070	5,291	4,080	5,304	4,020	5,226	4,162	5,411	4,162	5,411
Commonwealth Attorney		3,320	3,514	4,568	3,680	4,784	3,680	4,784	3,826	4,974	3,927	5,105	4,106	5,338
Court Holding			1,180	1,770	1,440	2,160	1,440	2,160	1,440	2,160	1,440	2,160	1,440	2,160
Court Support			564	705	564	705	564	705	564	705	564	705	564	705
Facility Support			2,840	3,266	2,840	3,266	2,840	3,266	2,840	3,266	2,840	3,266	2,840	3,266
TOTAL NSF & DGSF		9,937	15,948	20,703	16,374	21,309	16,384	21,322	19,410	25,403	19,653	25,719	19,832	25,951
Mechanical/Electrical (8%)				1,656		1,705		1,706		2,032		2,057		2,076
Building Subtotal				22,359		23,014		23,028		27,435		27,776		28,028
TOTAL BUILDING GROSS SF				27,949		28,767		28,785		34,294		34,720		35,034

108% Increase

TOTAL CIRCUIT COURTHOUSE PROJECTED SPACE NEED: 35,034 G.S.F.





RETAIN OR REBUILD?

- Rebuilding allows greater efficiency in design
- Rebuilding avoids complexities of partial demolition
- Rebuilding avoids difficulties of connecting new & existing construction
- Rebuilding avoids continued & extensive work to address existing issues
- Retaining has no historic, economic, architectural or functional advantage











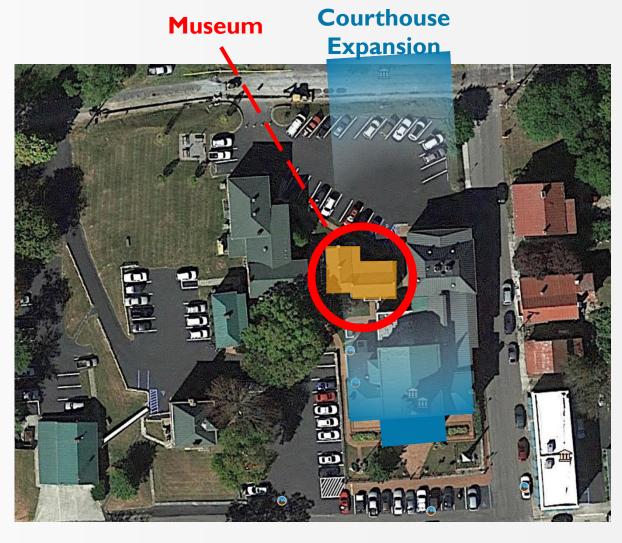


COURTHOUSE EXPANSION

- Courthouse expansion must be to the North
- Existing museum would be surrounded by the new facility
- Scale difference would be even greater between museum and new courthouse facility











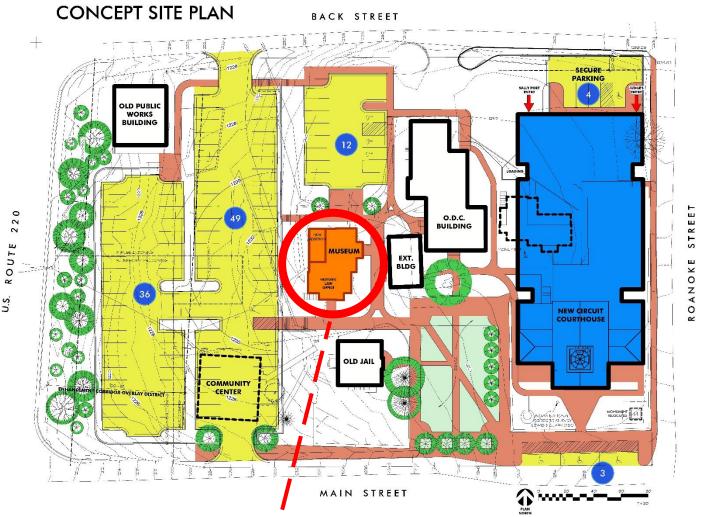
MUSEUM RELOCATION







MUSEUM RELOCATION







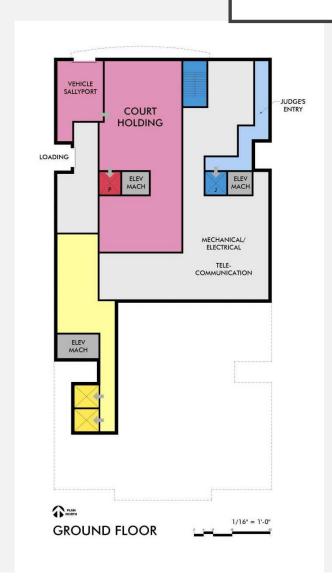


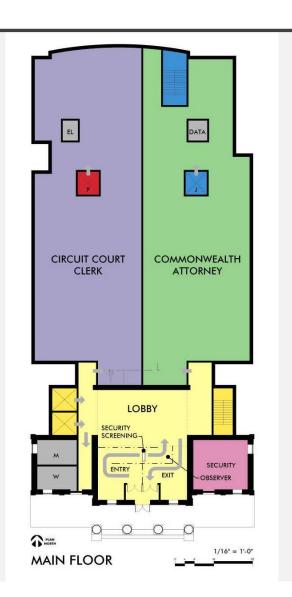


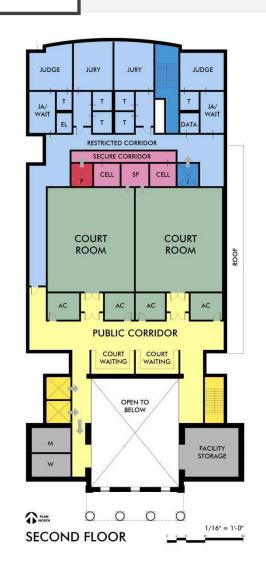




RECOMMENDED CONCEPT PLAN



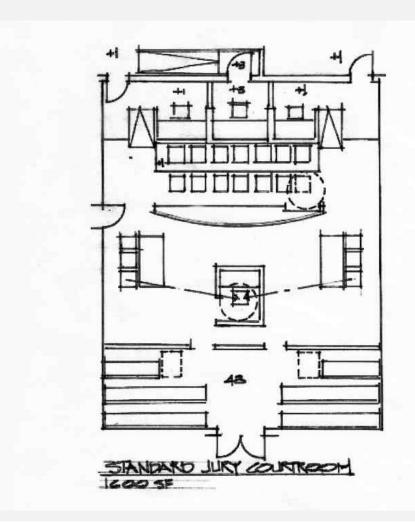








RECOMMENDED COURTROOM PLAN

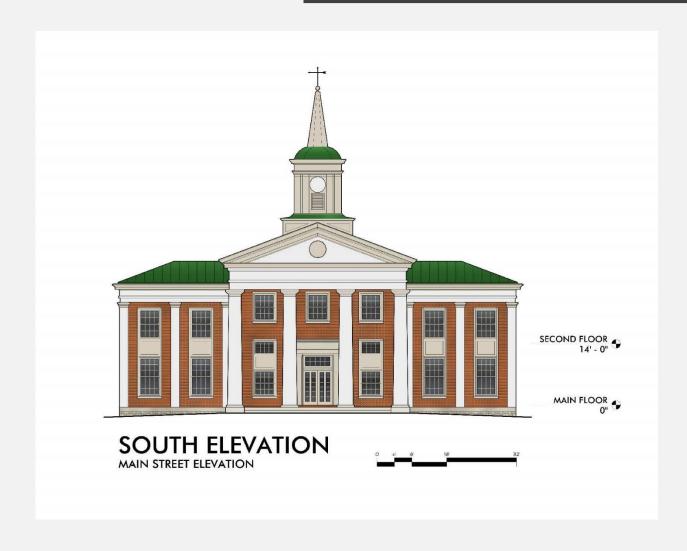








RECOMMENDED CONCEPT ELEVATIONS



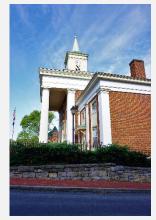






RECOMMENDED CONCEPT ELEVATIONS





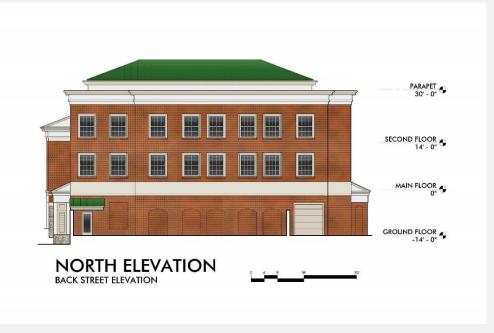






RECOMMENDED CONCEPT ELEVATIONS









SUSTAINABILITY

- Sustainability and energy efficiency: Codeprescribed and "best practice"
- High-efficiency mechanical equipment with digital controls
- MERV 14 filtration, UV lights and fresh air modulation
- Tight thermal envelope with insulated glass
- Reflective roof surface
- Low emitting materials with high-recyclable content
- LED lighting with occupancy sensors
- On-site recycling
- Indigenous plants













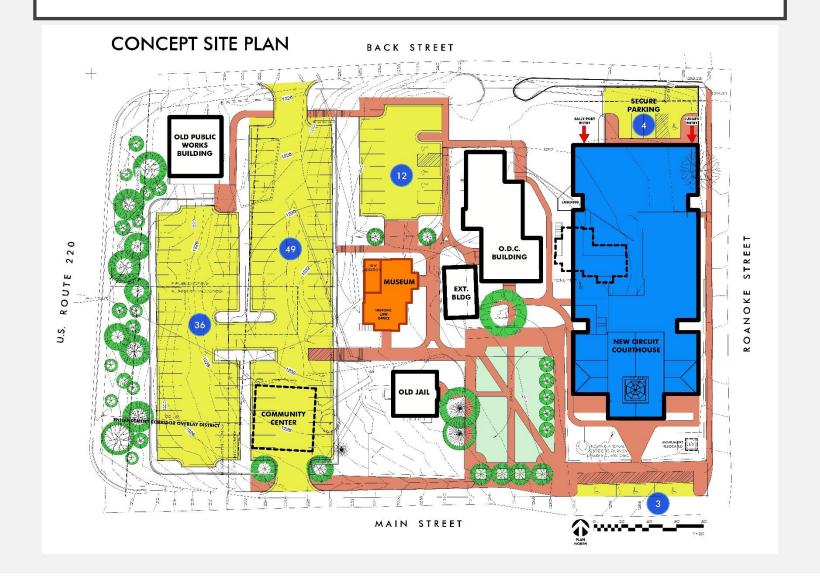








RECOMMENDED CONCEPT SITE PLAN





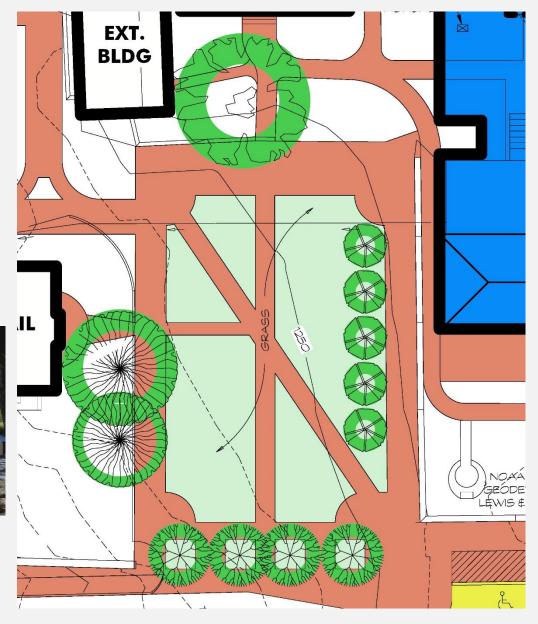


COURTHOUSE GREEN & PARKING

- "Courthouse green," lawned area for public community gatherings with pedestrian access only.
- New public parking to serve courthouse grounds, community events, and nearby commercial uses.







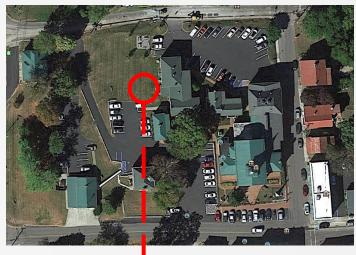




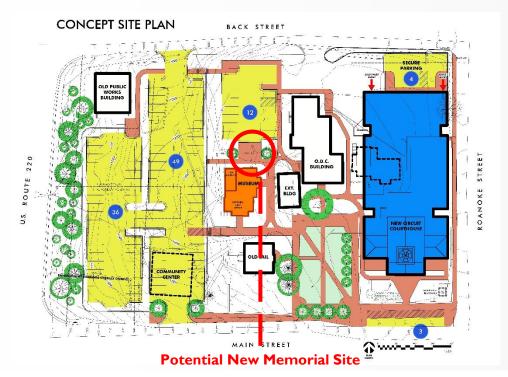
MONUMENT RELOCATION

- Monument site 15' from building construction line
- Relocation affords the best protection
- Recommended site next to relocated Museum





Potential New Memorial Site









ESTIMATED PROJECT COST

Building Construction Costs - \$282-387 / SF

Project Costs - A/E Fees, Geo-Technical & Third Party Inspections, Fixtures, Furnishings, & Equipment

ODC Rehabilitation Costs - Temporary Circuit Court & Clerk Location

Museum Relocation - Moving Costs, New Foundation, Added Restrooms

Utilities - Sanitary Sewer, Manholes, Transformer & Underground Electric

Parking Lots - Paved with Curbs & Lighting

Retaining Walls - Stone-faced within Enhancement Corridor Overlay District

Hardscape & Landscaping - Sidewalks, Lawns, & Planting

Stormwater - Nutrient Credits





ESTIMATED PROJECT COST

Existing Courthouse Demolition: \$600,000

Courthouse Building Construction: \$12,978,000

Secure Courthouse Parking Area: \$89,500 (Parking area + gated 9' high enclosure)

ODC Building Rehabilitation Allowance: \$682,000

Museum Relocation & Improvements: \$565,000 (Relocating entire building)

Design Contingency \$1,298,000 (10% of Building Construction)

TOTAL COURTHOUSE CONSTRUCTION \$16,212,500

Project Cost Multiplier x 1.22

TOTAL COURTHOUSE PROJECT COST	\$19,779,500	=	\$19 <i>,</i> 779,500
Site Hardscaping and Landscaping			\$1,460,500
Site Utilities			\$52,500
Retaining Walls			\$240,000
Imported Fill			\$10,600
Stormwater Measures			\$50,000
Parking Lots			
36 Space Lot			\$306,000
49 Space Lot			\$416,500

TOTAL CONCEPT ESTIMATED COST (2020 Costs) \$22,417,500

Escalation through mid-point of construction (Sept. 2023) × 1.0875

TOTAL CONCEPT ESTIMATED COST (Escalated) \$24,379,000









12 Space Lot



\$102,000

RECOMMENDED PROJECT SCHEDULE

	2022														2023																2024	l .												
	М	J	J	Α	S	0	N	D	J	F	М	Α	М	J	J	Α	S	0	N	D	J	F	М	Α	M	J	J	Α	S	0	N	D	J	F	М	Α	М	J.	J	A S	6 0) 1	N C)
Study Approval																																												
A/E Contract																																												
MUS-ODC DDs																																												
MUS-ODC Bid Package																																												
MUS-ODC Bid Negotiation																																												
MUS-ODC Construction																																												
Circuit Court Move to ODC																																									T			
BCO-CCH DDs																																												
BCO-CCH Bid Package																																												
Planning Commission Review																																												
BCO-CCH Big/Negotiation																																												
BCO-CCH Construction																				V																								
BCO-CCH Occupancy																																												





SUMMARY

Total Project Cost:

\$24,477,000

Estimated Schedule:

July 2021 – December 2024

